ELSEVIER

Aquaculture 135 (1995) 355–357

Aquaculture

Contents of Aquaculture, Volume 135

VOL. 135 NOS. 1–3 **1 OCTOBER 1995**

Special Issue: Pacific Rim Aquaculture

Prologue and Acknowledgments 1

Reproduction

Changes in serum steroid hormones and steroidogenic ability of ovarian follicles during artificial maturation of cultivated Japanese eel, *Anguilla japonica*
S. Ijiri, Y. Kazeto, N. Takeda (Hakodate, Japan), H. Chiba (Iwate, Japan), S. Adachi and K. Yamauchi (Hakodate, Japan) 3

In vitro biosynthesis of oestradiol-17β and 17α,20β-dihydroxy-4-pregnen-3-one by vitellogenic ovarian follicles from migrating New Zealand longfinned eels (*Anguilla dieffenbachii*)
P. Mark Lokman and G. Young (Dunedin, New Zealand) 17

Physiological evidence for two sturgeon gonadotrophins in *Acipenser transmontanus*
G.P. Moberg, J.G. Watson, S. Doroshov, H. Papkoff and R.J. Pavlick, Jr. (Davis, CA, USA) 27

Innervation of testes in the tilapia *Oreochromis niloticus*
M. Nakamura (Hachioji, Tokyo, Japan) and Y. Nagahama (Myodaijicho, Okazaki, Japan) 41

A novel method of hormone administration for inducing gonadal maturation in fish
N. Sato (Tokyo, Japan), I. Kawazoe, Y. Shiina (Ibaraki, Japan), K. Furukawa, Y. Suzuki and K. Aida (Tokyo, Japan) 51

Comparative effects of avian and piscine gonadotrophins on gonadal steroidogenesis, and of avian and piscine pituitaries on induction of spermiation and ovulation in the loach and white silver carp
J.Y.L. Yu, S.T. Shen, C.T. Liu, C.F. Weng, H.K. Peng and F.G. Liu (Taiwan, China) 59

Abstracts 73

Development

Combined application of cortisol and triiodothyronine in the culture of larval marine finfish
C.L. Brown and B.G. Kim (Kaneohe, HI, USA) 79

The role of thyroid hormone in tissue development in metamorphosing flounder
Y. Inui, K. Yamano and S. Miwa (Mie, Japan) 87

Conditioning improves performance of juvenile Chinook salmon, *Oncorhynchus tshawytscha*, to transportation stress
C.B. Schreck, L. Jonsson, G. Feist and P. Reno (Corvallis, OR, USA) 99

Development of the pituitary, thyroid and interrenal glands and applications of endocrinology to the improved rearing of marine fish larvae
M. Tanaka, J.B. Tanangonan (Kyoto, Japan), M. Tagawa, E.G. De Jesus (Tokyo, Japan), H. Nishida (Niigata, Japan), M. Isaka (Kyoto, Japan), R. Kimura (Yokohama, Japan) and T. Hirano (Tokyo, Japan) 111

Abstracts 127

Elsevier Science B.V.

Salmon smoltification

Downstream migratory behavior of salmonids and its relationship with cortisol and thyroid hormones: A review
M. Iwata (Tochigi, Japan) 131

Effects of premature seawater transfer and fasting on plasma growth hormone levels of yearling coho salmon (*oncorhynchus kisutch*) parr
V.S. Varnavsky (Petropavlovsk-Kamchatsky, Russia), T. Sakamoto and T. Hirano (Tokyo, Japan) 141

Abstracts 147

Growth and metabolism

A neuropeptide family from the sinus gland of the Mexican crayfish, *Procambarus bouvieri* (ortmann)
A. Huberman, M.B. Aguilar (México, D.F., México) and L. Scott Quackenbush (Miami, FL, USA) ... 149

Hyperglycaemic effects of dopamine in tiger shrimp, *Penaeus monodon*
C. Kuo, C. Hsu and C. Lin (Taipei, Taiwan, China) 161

Effects of gonadotropin-releasing hormone (GnRH) analogs and sex steroids on growth hormone (GH) secretion and growth in common carp (*Cyprinus carpio*) and grass carp (*Ctenopharyngodon idellus*)
H.R. Lin, M. Lu, X.W. Lin, W.M. Zhang, Y. Sun and L.X. Chen (Guangzhou, China) 173

Relationships among ration, salinity, 17α-methyltestosterone and growth in the euryhaline tilapia, *Oreochromis mossambicus*
B. Ron, S.K. Shimoda (Honolulu, HI, USA), G.K. Iwama (Vancouver, B.C., Canada) and E. Gordon Grau (Honolulu, HI, USA) 185

In vitro production of IGF-binding proteins (IGFBP) by various organs of the striped bass, *Morone saxatilis*
K. Siharath, R.S. Nishioka and H.A. Bern (Berkeley, CA, USA) 195

Amino acid sequences of a hyperglycaemic hormone and its related peptides from the Kuruma prawn, *Penaeus japonicus*
W. Yang, K. Aida and H. Nagasawa (Tokyo, Japan) 205

Abstracts 213

General endocrinology

Studies on rearing of lingcod *Ophiodon elongatus*
S. Appelbaum, W. Craig Clarke, J.E. Shelbourn, J.O.T. Jensen, J.N. C Whyte (Nanaimo, B.C., Canada) and G.K. Iwama (Vancouver, B.C., Canada) 219

Effects of salinity and nutritional status on growth and metabolism of *Sparus sarba* in a closed seawater system
N.Y.S. Woo and S.P. Kelly (Shatin, N.T., Hong Kong) 229

Abstracts 239

VOL. 135 NO. 4 — 15 OCTOBER 1995

Diseases, Parasites and Predators

Reduction in the in-vitro activity of flumequine against *Aeromonas salmonicida* in the presence of the concentrations of Mg^{2+} and Ca^{2+} ions found in sea water
L. Pursell (Galway, UK), O.B. Samuelsen (Bergen, Norway) and P. Smith (Galway, UK) 245

Genetics and Breeding

Survival and karyological analysis of reciprocal diploid and triploid hybrids between mud loach (*Misgurnus mizolepis*) and cyprinid loach (*Misgurnus anguillicaudatus*)
D.S. Kim, Y.K. Nam (Pusan, South Korea) and I.-S. Park (Kunsan, South Korea) 257

Induced gynogenesis in the silver barb (*Puntius gonionotus* Bleeker) and evidence for female homogamety
N. Pongthana (Bangkok, Thailand), D.J. Penman (Stirling, UK), J. Karnasuta (Bangkok, Thailand) and B.J. McAndrew (Stirling, UK) 267

Chromosomal location of Nors and C bands in F_1 hybrids of bighead carp and silver carp reared in Brazil
L.d.F. Almeida-Toledo, A.P.V. Bigoni (São Paulo, SP, Brazil), G. Bernardino (Pirassununga, SP, Brazil) and S.d.A.T. Filho (São Paulo, SP, Brazil) 277

Nutrition

Effect of restricted feeding regimens on compensatory weight gain and body tissue changes in channel catfish *Ictalurus punctatus* in ponds
M.K. Kim and R.T. Lovell (Auburn, AL, USA) 285

Physiology and Endocrinology

Advancing smolting to autumn in age 0+ Atlantic salmon by photoperiod, and long-term performance in sea water
J. Duston (New Brunswick, Canada) and R.L. Saunders (New Brunswick, Canada) 295

The effects of chronic and acute exposure to hydrogen sulphide on Atlantic salmon (*Salmo salar* L.)
M.C.B. Kiemer, K.D. Black, D. Lussot, A.M. Bullock and I. Ezzi (Oban, UK) 311

Development of sex control techniques for European sea bass (*Dicentrarchus labrax* L.) aquaculture: effects of dietary 17α-methyltestosterone prior to sex differentiation
M. Blázquez, F. Piferrer, S. Zanuy, M. Carrillo (Castellón, Spain) and E.M. Donaldson (West Vancouver, B.C., Canada) 329

The effect of salinity on growth rate, survival and swimbladder inflation in gilthead seabream, *Sparus aurata*, larvae
A. Tandler, F.A. Anav (Eilat, Israel) and I. Choshniak (Tel Aviv, Israel) 343